BY ORDER OF THE COMMANDER
302D AIRLIFT WING

302 AIRLIFT WING INSTRUCTION 21-101

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Maintenance

AIRCRAFT IMPOUNDMENT PROCEDURES

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements Air Force Policy Directive (AFPD) 21-1, *Air and Space Maintenance*. It identifies the conditions that would require, and prescribes procedural guidance for, the impoundment of unit aircraft/equipment. It also identifies responsible agencies in the event an impoundment becomes necessary. Actions directed in this instruction ensure the preservation of mishap evidence. This instruction applies to all 302 Airlift Wing (AW) personnel involved in the impoundment of aircraft and equipment. It further augments Air Force Instruction (AFI) 21-101, Air Force Reserve Command (AFRC) Supplement (Sup) 1, *Aerospace Equipment Maintenance Management*, AFI 11-2C-130, Volume 3, *C-130 Operations Procedures*, and AFI 91-204, *Safety Investigations and Reports.*

SUMMARY OF REVISIONS

This document is substantially revised and must be completely reviewed.

1. General Information.

1.1. Only individuals directly involved in the management, making safe, troubleshooting, or repair of impounded aircraft or equipment, or their related records, are authorized access to such aircraft/equipment.

1.2. Unless conditions require an aircraft or piece of equipment to be isolated in an area away from the normal maintenance activities, all impoundment processes will be conducted/performed on the 302 AW portion of the Peterson AFB flight line or in hangar bays. The Investigating Official, as defined in AFI 21-101, Chapter 11 and paragraph **3.** of this instruction, will be the decision authority for the relocation of impoundment exhibits.

2. Conditions Warranting Impoundment.

2.1. In addition to mandatory impoundment of aircraft/equipment listed in AFI 21-101, Chapter 11, an impoundment will also be directed:

2.1.1. When unusual operating performance or system malfunction is experienced.

2.1.2. When an airdrop incident results in personal injury or aircraft/equipment damage.

2.1.3. When an airdrop malfunction or an off-drop zone (DZ) drop occurs.

2.1.4. When a system malfunction repeats for the third time.

2.1.5. When an aircraft sustains Foreign Object Damage/Debris (FOD) from an unknown cause, except in cases where nicked engine compressor blades can be blended and/or are reparable within field-level technical order limits.

2.1.6. When an item or a portion of a broken tool is discovered missing and is not found immediately thereafter see paragraph **7.** for procedures to follow if this condition exists for an aircraft that has already taxied or is airborne.

2.1.7. By an Interim Safety Board, or formal Safety Investigation Board; concurrent with an investigation involving 302 AW equipment.

2.1.8. When infestation of insects, rodents or similar conditions is evident, the Maintenance Operations Center (MOC) will contact Host Base Civil Engineer Entomologist for possible quarantine.

2.2. Aircraft may be impounded by direction of the Wing Commander (AW/CC), Operations Group Commander (OG/CC) or Maintenance Group Commander (MXG/CC) if any of the following conditions occur:

2.2.1. Binding engine controls.

2.2.2. Other discrepancies or malfunctions considered to be unusual or requiring further investigation.

2.3. Related records will be impounded following a mishap as defined in AFI 91-204, *Safety Investigations and Reports*, or at the discretion of the Impoundment Authority or Impoundment Official, as defined in AFI 21-101 Chapter 11 and paragraph **3.1.** and **3.3.** below.

3. Roles and Responsibilities.

3.1. Impoundment Authority (IA). The AW/CC, MXG/CC, OG/CC, or designated representatives have the authority to impound aircraft, equipment or related records. The IA will designate an Impoundment Official (IO) from the list of designated IOs on file either at the QA office or in the MOC.

3.2. Designated Representative. An individual specifically authorized in writing to assume IA responsibilities in the absence of the person bearing prime responsibility for an action.

3.3. Impoundment Official (IO). Wing Safety (SE), Maintenance Group Quality Assurance (QA) and Operations Group Stan/Eval (OGV) are the only functions authorized to investigate impounded aircraft/equipment or any inadvertent weapons release or explosive mishap. SE will appoint an appropriate Investigating Official when working under Safety Board Authority for the purpose of investigating AFI 91-204 related events.

3.4. QA is responsible for coordinating the security of impounded equipment and related records with MOC and the responsible maintenance work center. Work centers will obtain clearance from the IO to access and perform maintenance on impounded aircraft. The QA Superintendent or designated representative and Production Superintendent (MXOOC) will coordinate to determine whether maintenance may be performed on the impounded aircraft/equipment.

3.5. The QA Superintendent or designee is the single point of contact (POC) for impounded aircraft or equipment.

3.6. The Aircraft Maintenance Squadron Commander (AMXS/CC) or designated maintenance officer will closely monitor all situations involving aircraft/ equipment impoundments.

3.7. Copies of all letters designating authority for impoundment responsibilities will be on file in QA and in the MOC.

4. Procedures.

4.1. Whenever impoundment occurs, regardless of the reason, the following actions are required:

4.1.1. MOC is immediately notified of the conditions warranting impoundment. MOC will then notify the following individuals and wing staff agencies:

4.1.1.1. MXG/CC.

4.1.1.2. Production Superintendent.

4.1.1.3. AMXS/CC.

4.1.1.4. MXG/QA,

4.1.1.5. AMXS/MXA.

4.1.1.6. AW/CC.

4.1.1.7. Command Post (AW/CP).

4.1.1.8. Security Forces Squadron (SFS), if sabotage or tampering is suspected; Maintenance Operations Center (MOC) provides information as required In Accordance With (IAW) 302 AWI 31-102, *Tampering or Suspected Damage to Aircraft*.

4.1.1.9. AW/SE (IO for safety-related mishaps).

4.1.2. The decision to impound aircraft/equipment is made by the AW/CC, MXG/CC, OG/CC or designated representative, who then becomes the Impoundment Authority of record for documentation purposes.

4.1.3. The aircraft is impounded by entering a Red X in the AFTO Form 781A, **Maintenance Discrepancy and Work Document**, stating that the aircraft is impounded as directed by the Impoundment Authority (or IAW this instruction, if no IA can be reached). Include the reason for impoundment and a reference to the condition requiring impoundment (page and item number of related discrepancy). Use Job Control Numbers starting with the Julian date and ending with 8494 through 8499.

4.1.4. When an aircraft is impounded for AFI 91-204 procedures, the cockpit voice recorder (CVR) is removed and impounded as well. The CVR is removed as soon as possible and secured in the Maintenance Group Quality Assurance (MXG/QA) office or MOC, where custody is relin-

quished only to an authorized IO. The Digital Flight Data Recorder (DFDR) may also be removed if so directed by the IO. The Maintenance Information System (G081) files for the related aircraft/equipment will be "locked" by MOC or the Maintenance Data Systems Analyst (MDSA).

4.1.5. The aircraft will be secured in its recovered state to preserve evidence. Propellers may be positioned with the number one blade in the twelve o'clock position and taken "out-of-feather" during periods of cold weather if, in the opinion of the IA, it would not interfere with the subsequent investigation.

4.1.6. The MXG/CC (or OG/CC, in the case of an airdrop malfunction) will assign an IO to manage the impounded aircraft/equipment (typically, the 731 Airlift Squadron (AS) Tactics Officer for airdrop malfunctions and QA for all others). Enter the name of the IO in the impoundment entry discrepancy block of the AFTO Form 781A or in the appropriate equipment form. OGV and AW/SE will work closely with QA when assigned IO duties.

4.1.7. Impounded aircraft/equipment records are closely controlled by the IO, who provides limited access IAW applicable directives.

5. After Normal Duty Hours.

5.1. The Night Shift supervisor or designated representative will ensure the intent of this AWI is met to the maximum extent possible. The aircraft will be secured and a boxcar seal placed on the crew entrance door. The seal number will be written in ink in the AFTO Form 781A impoundment entry discrepancy block and the aircraft forms placed inside the aircraft prior to the seal installation. Only the assigned IO may remove this seal.

6. Flight Control Malfunctions.

6.1. Special attention will be given to flight control malfunctions. 302 MXG will use the "Blue Chip" Team concept to troubleshoot and repair these type malfunctions. As a minimum, the following guidelines will be followed when discrepancies involving primary and secondary flight controls are reported:

6.1.1. Each work center involved in the troubleshooting and repair of flight control malfunctions will assign the most highly qualified personnel to the "Blue Chip" Team. Make every effort to keep the same personnel assigned until the malfunction is corrected.

6.1.2. Minimum team member qualification must be a 7-skill/journeyman-level technician from each affected work center, plus an IO from QA.

6.1.3. Applicable job guides, technical data and directives will be utilized for all phases of work and will be documented as completed. Each work center will enter its portion of the trouble-shooting as a separate entry for each aspect of both troubleshooting and repair phases. The Team Chief, as designated by the Maintenance Superintendent/designated representative, will clear the original discrepancy (Red X).

6.1.4. The following situations require the Flight Superintendent/designated representative of the applicable work center having primary responsibility for the discrepancy to clear the Red X:

6.1.4.1. Uncommanded flight control inputs reportable IAW AFI 91-204.

6.1.4.2. Flight control problems occurring in the "direct manual" mode

6.1.4.3. Flight control problems occurring when the "auto" mode fails to disengage.

6.1.5. Only the MXG/CC or designated representative will be the releasing authority for the impoundment.

7. Lost Tool Notification.

7.1. If a tool is discovered missing after an aircraft has taxied or is airborne, MOC will notify AW/CP of the possibility of the lost tool being onboard the aircraft. Information concerning the lost tool and its probable location will be relayed to the crew as soon as possible. If the aircraft is still on the ground, it will remain on the ground until the tool is accounted for. If airborne, consideration should be given to landing as soon as possible, preferably at home station.

8. Airdrop Malfunctions.

8.1. Airdrop malfunctions will be investigated by 731 AS/DOXT (Tactics) and/or a designated joint airdrop inspection (JAI)-qualified loadmaster using procedures in Air Force Joint Instruction (AFJI) 13-210, *Joint Airdrop Inspection Records, Malfunction Investigations, and Activity Reporting* AFRC Sup 1 and AFI 11-2C-130, V3, Ch10/302 AW Sup 1. The IO assigned to investigate airdrop malfunctions will verbally release the aircraft from impoundment to the Maintenance Squadron Quality (MXQ) Superintendent or designee as soon as a determination has been made concerning the mishap cause. The IO will also contact the 39 Aerial Port Squadron (APS) for disposition of airdrop equipment still onboard the aircraft.

9. Reporting Requirements.

9.1. QA will use the Quality Assurance Tracking and Trend Analysis System (QANTTAS) to report all impoundment activities/actions.

9.2. QA will report all incidents of multiple-engine power loss to AW/SE as a High Accident Potential (HAP) report. The report will include specific values of RPM, torque, fuel flow, TIT and other related power plant indications.

9.3. 731 Airlift Squadron Operation Office (AS/DOXT) will report Airdrop Malfunctions IAW procedures outlined in AFJI 13-210, AFRC Sup 1 and AFI 11-2C-130, V3, Ch10/302 AW Sup 1.

RICHARD R. MOSS, Brig Gen, USAFR
Commander

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFPD 21-1, *Air and Space Maintenance*

AFI 21-101, AFRC Sup1, *Aerospace Equipment Maintenance Management*

AFI 91-204, *Safety Investigations and Reports*

AFI 11-2C-130V3, Chapter 10, *Local Operating Procedures*

AFJI 13-210, AFRC Sup1, *Joint Airdrop Inspection Records, Malfunction Investigations and Activity Reporting*

302 AWI 31-102, *Tampering or Suspected Damage to Aircraft*

Abbreviations and Acronyms

APS—Aerial Port Squadron

AS—Airlift Squadron

IA—Impoundment Authority

AFI—Air Force Instruction

AFJI—Air Force Joint Instruction

AFPD—Air Force Policy Directive

AMXS/CC—Aircraft Maintenance Squadron Commander

AS/DOXT—Airlift Squadron Operation Office

AW—Airlift Wing

AW/CC—Wing Commander

AW/CP—Command Post

CVR—Cockpit Voice Recorder

DFDR—Digital Flight Data Recorder

DZ—Drop Zone

FOD—Foreign Object Damage/Debris

HAP—High Accident Potential

IO—Impoundment Official Impoundment Official

JAI—Joint airdrop inspection

MDSA—Maintenance Data Systems Analyst

MOC—Maintenance Operations Center

MXG/CC—Maintenance Group Commander

MXOOC—Production Superintendent

MXG/QA—Maintenance Group Quality Assurance

OG/CC—Operations Group Commander

OGV—Operations Group Stan/Eval

POC—Single point of contact

QA—Quality Assurance

QANTTAS—Quality Assurance Tracking and Trend Analysis System

SE—Wing Safety

SFS—Security Forces Squadron